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| 09/347,390 | 07/06/1999 | PHILIP E. EGGERS | C-06-5 | 3789 |
| 21394 | 7590 | 07/27/2007 | | |
| ARTHROCARE CORPORATION 680 VAQUEROS AVENUE SUNNYVALE, CA 94085-3523 | | | EXAMINER PEFFLEY, MICHAEL F | |
| | | | ART UNIT 3739 | PAPER NUMBER |
| | | | NOTIFICATION DATE 07/27/2007 | DELIVERY MODE ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

intel_prop@arthrocare.com

88

Office Action Summary

Application No.

09/347,390

Applicant(s)

EGGERS ET AL.

Examiner

Michael Peffley

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-49 is/are pending in the application.
- 4a) Of the above claim(s) 25 and 27-40 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7, 9-24, 26, 41-46 and 49 is/are allowed.
- 6) ☒ Claim(s) 47 and 48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7-6-1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6-18-07.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 18, 2007 has been entered.

Claims 25 and 27-40 remain withdrawn from consideration. Claims 27-40 were directed to an invention non-elected without traverse. Acknowledgement is made of the cancellation of claim 50. The following is a complete response to the June 18, 2007 communication.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 47 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aita et al (5,389,096) in view of the teachings of Swartz et al (5,902,289), Bales et al (4,682,596) and Nardella (5,334,193).

Aita et al disclose a laser catheter device for performing PMR procedures. The catheter is advanced into the ventricle of a heart and then used to form channels within

Art Unit: 3739

the heart wall. Aita et al fail to specifically disclose the use of electrosurgical energy as the treatment energy.

Swartz et al disclose another cardiac treatment catheter apparatus. In particular, Swartz et al teach that it is generally known in the art to substitute various well-known energy modalities in a cardiac ablation catheter. In particular, Swartz et al teach that it is known to use either laser or RF energy for ablating cardiac tissue (col. 11, lines 3-12). However, Swartz et al fail to disclose the use of a conductive fluid to enhance the electrosurgical procedure or the specific use of bipolar electrodes. It is noted that Swartz et al teach that multi-electrode catheters may be used to ablate heart tissue (col. 23, lines 39-40).

Bales et al disclose another RF catheter device for the treatment of cardiac tissue. In particular, Bales et al teach that it is known to use a bipolar electrode arrangement with a distal active electrode and a proximally located return electrode (Figures 3 and 10) to perform vascularizing procedures. Bales et al also disclose the use of a fluid delivered to tissue during the procedure, as well as a suction source to provide suction for removing ablated tissue (see col. 5, lines 45-50). Bales et al do not specifically state the fluid delivered is conductive.

Nardella disclose a device analogous to the Bales et al device. It includes a catheter having a bipolar electrode arrangement for ablating tissue. Nardella also disclose providing a fluid to the electrode/tissue interface for cooling, and specifically teach that the fluid may be saline (col. 4, line 51). Nardella also specifically teach the use of RF energy for ablating tissue having voltage levels within the range set forth by

Art Unit: 3739

the applicant (col. 5, lines 60-64). The examiner maintains that there is sufficient motivation to provide the combination of the Bales et al and Nardella teachings to the Aita system. Such a system that provides for the electrode structure for treating tissue in the vicinity of a saline solution with the appropriate voltage levels would inherently yield the same results (i.e. inducing the discharge of energetic electrons and photons).

To have provided the Aita et al system with an RF energy catheter, in lieu of the laser energy catheter, for performing the TMR procedure would have been an obvious modification for one of ordinary skill in the art, particularly since Swartz et al teach the known substitutability of these two modalities in treating cardiac tissue. To have further provided a conductive solution to the tissue site while ablating with bipolar electrodes to enhance tissue ablation would have been an obvious consideration for one of ordinary skill in the art in view of the teachings of Bales et al and Nardella.

Allowable Subject Matter

Claims 1-7, 9-24, 26, 41-46 and 49 are allowed.

Response to Arguments

Applicant's arguments filed June 18, 2007 (originally presented in the After Final response of January 11, 2007) have been fully considered but they are not persuasive. Applicant contends that neither Bales nor Nardella makes any disclosure of using an electrosurgical device to apply RF energy to a conductive fluid to ablate tissue. The examiner has maintained, and continues to maintain, that while Bales and Nardella do not make an express disclosure, that such a result would necessarily occur. Applicant has asserted that there is no indication that it was known at the time of the invention

Art Unit: 3739

that such an event was a result of applying RF energy to conductive fluid. Whether or not inventors Bales and Nardella were aware of the mechanism by which their device actually operated does not mitigate the fact that these devices would have inherently operated in such a manner with or without their knowledge. As to applicant's contention that it is well established that "obviousness cannot be predicated on what is not known at the time an invention is made, even if the inherency of a certain feature is later established", the examiner maintains that obviousness in this rejection is not predicated on the "unknown". The examiner's basis for applying the Bales and Nardella teachings is not based on their teaching of using the fluid to ablate tissue. As argued by the applicant, they do not specifically teach such a function. Rather, the examiner has used proper motivation to combine the teaching of Bales and Nardella to provide a conductive fluid to an RF device for the ablation of tissue. That is, the examiner has used a properly conceived teaching of providing a conductive fluid to a device used in a method as set forth in the instant application claims. In making such a combination of the teachings, it is inherent that the device would operate in the same manner, to energize the release of photons and electrons to ablate tissue. Once again, whether or not the inventors or those of ordinary skill in the art would have recognized that the device operated under those specific principles does not mitigate that simple fact that it would have inherently operated that way.

Finally, applicant has asserted that it is "unknown" whether or not the prior art devices would have performed the function since applicant has disclosed that "certain suitable electrode geometries" are necessary to provide the particular function. The

Art Unit: 3739

examiner maintains that the prior art used in the rejection provides electrodes with geometries very similar to that disclosed in the instant application. In particular, Bales et al disclose a bipolar system having electrode arrangements similar to those disclosed in applicant's specification. Applicant's specification fails to provide any specific recitation of what those geometries may be, and applicant's arguments have failed to give any specific explanation as to why the geometries shown in the prior art references would be incapable of performing in the same way. Such a line of argument, given applicant's limited description of the required geometries, would lead one wonder if the specification is indeed enabling to one of ordinary skill in the art. It is the examiner's presumption that the specification is enabling, and that the numerous different embodiments and arrangements are evidence that the desired effects may be elicited from any number of similarly constructed devices.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Peffley whose telephone number is (571) 272-4770. The examiner can normally be reached on Mon-Fri from 7am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3739

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Peffley/
Primary Examiner
Art Unit 3739

/mp/
July 10, 2007